

IMPROVING PACKET FORWARDING THROUGHPUT WITH PARTIAL PACKET ORDERING

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ABSTRACT

5 The present invention describes a system and method of improving packet forwarding throughput in a router by reducing head of line blocking. In one embodiment of the present invention, incoming packets are stored in a packet reorder buffer. The packets are reordered for forwarding while maintaining the order of packets in a distinct flow. Packets belonging to a distinct flow require to be forwarded in the order that the router receives them. Packets from different flows are reordered such that their forwarding order can be different than the order in which they were received. Packets from the same flow are sent out in the same order as the router receives them.